

0009630787 - Drawing available

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Set of screening components for connector used in telecommunications and data transfer

Patent Assignee: QUANTE AG (QUAN-N)

Patent Family (1 patents, 1 countries)

Patent Application

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Patent Details

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Alerting Abstract DE U1

NOVELTY - Screening tabs (12) are complemented by locking sections (20) for attachment to further screening sections. The interlocked screening components are held on the connector.

USE - To prevent data corruption caused by e.g. self-emission, cross talk or external interfering emissions in modern high speed data transmission; supporting e.g. HDSL, ADSL, VDSL and multimedia applications including Video on Demand.

ADVANTAGE - The screening components allow existing connectors to be upgraded with minimal difficulty.

DESCRIPTION OF DRAWINGS - The screening tabs appear in perspective.

12 screening tabs

20 locking sections

1/7/1

DIALOG(R)File 324:German Patents Fulltext

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0003548338 **Image available**

Sentence of screen construction units of a pinboard of telecommunications
and data processing technology as well as pinboard

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Description (English machine translation)

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AG Uellendahler STR. concerns 353 D-42109 Wuppertalsentence
of screen construction units of a pinboard of telecommunications-and
data processing technology as welas pinboard technicaarea the
invention a sentence of screen construction units of a pinboard of
telecommunications-and data processing technology as welas a
pinboard.

In the area mentioned win during the transmission of
digital and similar spoke-and data signals new transmission
techniques, e.g. HDSL, ADSL and VDSL, as well as multimedia
applications (for example "video on that and") at meaning, with which
particularly high data transmission rates arise. For these
applications those are not at present well-known pinboards suitable
regarding the interfering radiations, noise immunity, the close
cross-talk damping and the uebersprechdaempfung. For this reason
in some countries at present is changed over to begin according to
standard connection technology which are classified under a
particularly high category regarding the characteristics mentioned, in
particular the uebersprechdaempfung, as them were inserted so far only
for example with the structured wiring by buildings.

State of the art regarding the shielding of pinboards for
high data transmission rates is well-known it from the DE 196 14 788
AI to push in from down between individual contact contacts of shims

which with the plastic housing are rested. Due to the fact that the shims are pushed in from down, it cannot be completed this well-known pinboard in the appropriate condition with an appropriate shielding. Furthermore no measures are intended, in order to shield also the exteriors of the border, so that no higher category can be achieved.

From the EP 0,524,115 Bl a contact strip is well-known for Telefonoder data lines, with which a shielding of the exteriors of the border is realized by the fact that metallic leader guidance are up racable on the exteriors of the border. Thereby additionally so-called half lattices can be fastened by a force fit, which take the top side off of the border protecting. As mentioned, however the training of rest mechanisms at leader executions is necessary for the mounting of these two construction units, with which these at the border one rests.

Representation of the invention the solution of this task takes place via the characteristics of the requirement 1.

'.. 3.....

Bolting device mechanism for bolting device with at least a further screen construction unit up, so that locked with one another the screen construction units are held at the border. In other words the mounting of several screen construction units at the border takes place via the fact that these are locked in such a manner and rested with one another in each case and not necessarily with the border that they are kept safe on the one hand at the border. On the other hand the substantial advantage arises as a result of the bolting device between individual screen construction units that as purposes of the bolting device the connection between the screen construction units must be trained necessarily so stably and firmly that a reliably electrically leading connection between the construction units is reached at the same time. Thereby the screen construction units are interconnected all electrically leading and can be put together on mass.

The fact that the individual screen construction units with one another according to invention and not with the border it is rested furthermore leads to it that a pinboard can problem-free with the sentence of screen construction units be completed, so that it fulfills a higher category regarding the cross modulation. Furthermore no special measures must be planned, in order to make the bolting device possible of the screen construction units at the border, since these are fastened to a certain extent together.

Preferential training further of the invention are described in the further requirements.

bolting device mechanisms reliably holding to be planned can.

For the bolting device between an edge of a first screen construction unit and a further screen construction unit it turned out as favourable to plan the bolting device mechanism at the further screen construction unit than a pair of clamping contacts. These can be arranged in such a manner that the edge of the first mentioned screen construction unit can be introduced between the clamping contacts surely wedging and thus locking, whereby in the imported condition the sheet metal level screen construction unit extends perpendicularly to the sheet metal level of the further screen construction unit, which exhibits the pair of clamping contacts in the form of to each other parallel clamping fingers, to each other.

In particular with that preceding described locking by introduction of an edge screen construction unit between two clamping contacts of the further screen construction unit it offers for the safe bolting device of advantages, if the first mentioned screen construction unit exhibits additionally a clamping nose, by which the edge of the further screen construction unit is embracable. In other words that edge, which is imported between the clamping contacts, is provided with a nose or a projection/lead, so that the two screen construction units in the appropriate condition cannot shift against each other and in a certain situation at the pinboard to remain surely.

In certain applications a bolting device mechanism in form of a clamping finger proved as favourable, which is importable into an opening in a further screen construction unit.

Preferably a such clamping finger in a plan view exhibits seen an edge curved outward, so that when introducing to the described opening a bolting device effect is reached by the fact that the broadest range of the clamping finger at the edge of the opening by-steps springily, and which clamping finger can be pulled out in the following only with certain energy expenditure again.

With attempts it turned out here furthermore as favorable to plan in the clamping finger with edge curved outward an opening which is formed preferably oval, so that the arc-shaped metal strips between the opening and the edge curved outward provide when introducing to the opening of a further screen construction unit

springily for a reliable mounting plate.

Regarding the components of the sentence according to invention of screen construction units it is preferred that this exhibits at least a shim importable between individual contact contacts of the pinboard and/or at least a screening plate attachable at the border exterior and/or at least ein.an the border lower surface attachable cable shroud. By the shims importable between individual contact contacts particularly good close beside speech characteristics can be reached. A screening plate attachable at the border exterior provides for a screen of the border altogether to the sides. Finally a cable shroud makes possible that additionally the screen of an arriving cable, attachable at the border lower surface, thus the network or the foil, can be presented and contacted, so that also the screen mechanism of the cable is put on mass connected with at the border attached the screen construction units electrically leading and over these.

Regarding that screen construction unit, which makes the connection with mass, it is preferred that it concerns here the screening plate, which at at least a side edge a clamping contact for contacting with a carrier system of telecommunications-and data processing technology exhibits. For example the lateral can be in such a manner arranged clamping contact that in the condition that a border is attached to an attachment tub also to it attached screen construction units, the edge of the tub is contacted.

Although the sentence according to invention of screen construction units is in principle as a sentence of re-tooling construction units conceivable, which are attached if necessary for the reaching of a higher category to a pinboard, is preferred according to invention providing a pinboard according to standard with a such sentence from screen construction units to. As mentioned, here the advantage can be realized that at the border no special measures are necessary for the attachment of the screen construction units, since these are locked with one another for firm mounting plate at the border.

Short description of the designs is more near described in the following one exemplarily in the designs represented execution form of the invention. Show: Fig. 1 a perspective explosion opinion of a pinboard with the sentence attachable to it of screen construction units; Fig. 2 a perspective opinion of a remark example of a shim of the sentence according to invention of screen construction units; Fig. 3 a perspective opinion of a remark example of a screening plate of the sentence according to

invention of screen construction units; and Fig. 4 a perspective opinion of a remark example of a cable shroud of the sentence according to invention of screen construction units.

Detailed description of an execution form of the invention as in Fig. 1 is represented, is expandable a pinboard 10 for complete screen with different screen construction units, which are attachable with one another at the pinboard 10 by bolting device. Here it acts on the one hand over from the top side between individual contact contacts of the pinboard of 10 insertable shims 12, their shape in detail with reference to the Fig. 2 one describes. Furthermore the two long sides of the pinboard 10 with screening plates 14 are screenable, by those the rechtere in detail in Fig. 3 is represented. Finally the shielding of the border takes place from the lower surface as well as the possibility of contacting the screen of an arriving cable via in detail in g in Fig. 3 screening plate shown 14 preferentially together with a mirror-image arranged further screening plate 14 (Fig compares. 1) at the long sides of the pinboard 10 arranged. Into this condition of the two screening plates 14 at least a shim 12 from above into the pinboard 10 is inserted, so that the screen construction units mentioned 12, 14 are locked with one another in the following way.

within the range of the widened section 18 wedging between the two clamping fingers of a pair 34 to be held can. Thereby results an additional safety device against pulling out the shim 12 upward (in accordance with the representation of Fig. 2).

As safety device against a shift of the screening plate 14 in a direction, locked at the shim 12, laterally (thus in accordance with Fig. 2 from left) the clamping nose 24 mentioned above is intended down to the right above. This rises up in locked with one another the condition of the two screen construction units 12, 14 little over the edge of the screening plate 14 downward, so that this considerably laterally by the pinboard 10 cannot be bent.

Regarding in Fig. 3 screening plate shown 14 is still mentioned that between two pairs 34 of clamping fingers somewhat shorter, to a large extent rectangular tongue 36 is, against in the condition that a pair vein is set on the contacts of the pinboard 10, the foil screen of the pair vein rests. Thus also the shielding of the pair vein is connected with the remaining screen construction units 12, 14 and 16. Finally the remark example shown of a screening plate at both lateral edges exhibits in each case two earth contacts 38, those the contacting of different attachment systems, in

which, serve example shown of different attachment tubs.

It is obvious that alternatively only one of the two earth contacts 38 can be planned, and that one or more earth contacts can be trained of 38 in an appropriate way for the contacting other attachment systems of the telecommunications technology. Over the earth contacts 38 not only the individual screening plate 14, but connected to ii by the bolting device and the thus reliably electrically leading connection with the other screen construction units are also the other screen construction units with that attachment system and therefore with mass with the remark example shown. In all other respects the bolting device takes place in Fig. 1 on the left of recognizable screening plate 14 in the same way as those in Fig. 3 in individual represented screening plate 14.

Claims (English machine translation)

1. Sentence of screen construction units (12, 14, 16) of a Anschluleiste (10) of telecommunications-and data processing technology, whereby at least a screen construction unit (12, 14) exhibits a bolting device mechanism (20, 24, 30, 34) in such a manner for bolting device with at least a further screen construction unit (12, 14, 16), there locked with one another the screen construction units (12, 14, 16) by the Anschluleiste (10) to be held.
2. Sentence from screen construction units to requirement 1, by characterized since this exhibits at least a screen construction unit (12, 14, 16) out of sheet metal, preferably a copper sheet alloy.
3. Sentence from screen construction units to requirement 1, or 2, by it characterized, there the bolting device mechanism a pair (34) from clamping contacts is, between which an edge of a further screen construction unit (12) is einfhrbar.
4. Sentence characterized by screen construction units after at least one the preceding Ansprche, thereby, there the bolting device mechanism a clamping nose (24) is, by which an edge of a further screen construction unit (14) is embracable.
5. Sentence characterized by screen construction units after at least one the preceding Ansprche, thereby, there the bolting device mechanism a clamping finger (20) is.
6. Sentence from screen construction units to requirement 5, by it characterized, there the clamping finger (20) one - in a plan view seen-after auen gewlbten edge (26) exhibits.
7. Sentence from screen construction units to requirement 5 or 6, by it characterized, there the clamping finger

(20) one preferably oval formed ffnung (28) exhibits.

8. Sentence characterized by screen construction

units after at least one the preceding Ansprche, thereby, there the bolting device mechanism one ffnung (30) is, into which a clamping finger (20) of a further screen construction unit (12) is einfhrbar.

9. At least at least sentence characterized by

screen construction units after at least one the preceding Ansprche, thereby, there these at least a shim (12), einfhrbares between individual contact contacts of the Anschluleiste (10), and/or to the Leistenaueseite attachable screening plate (14) and/or in the border lower surface attachable cable shroud (16) exhibits.

10. Sentence from screen construction units to

requirement 9, by it characterized, there the screening plate (14) at at least a side edge at least a clamping contact (38) to contacting with a Trgersystem of telecommunications-and data processing technology exhibits.

11. Sentence separated from screen construction

units to requirement 10, by it characterized, there trained clamping contact (38) intended is.

12. Anschluleiste (10) with a sentence of screen

construction units (12, 14, 16) after at least one the preceding Ansprche.